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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/708,494 | 11/09/2000 | Pascal A. Nsame | BUR9-2000-0071-US1 | 2612 |

29154 7590 08/17/2004

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| EXAMINER |
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HUYNH, KIM T

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| ART UNIT | PAPER NUMBER |
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2112

DATE MAILED: 08/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/708,494

Applicant(s)

NSAME, PASCAL A.

Examiner

Kim T. Huynh

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Swanstrom et al. (US Patent 5,872,942)

As per claims 1, 10, 11, 20, 21, Swanstrom discloses a system-on-a-chip integrated circuit structure comprising:

- a bridge(fig.1, 106) having a plurality of channels in said bridge; (fig.1, 104,108,120, 130), (col.16, line 62-col.17, 4) wherein each these busses comprising single or multiple channels, ie, multimedia bus (130) comprises separate channels for different data types. (col.4, lines 19-26)
- a processor local bus connected to said bridge, wherein said bridge includes a first channel dedicated to said processor local bus (fig.1, 104); (col.7, lines 49-51)
- at least one logic device (fig.1, 107) connected to said processor local bus; (col.3, lines 11-14)

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- a peripheral device bus (fig.1, 120) connected to said peripheral device bus; at least one peripheral device connected to said peripheral device bus; (col.8, lines 6-13)
- at least one memory (fig.1, 110) unit connected to said bridge, wherein said bridge includes a third channel (fig.1, 108) dedicated to said memory unit; (col.4, lines 37-51)
- at least one input/output unit connected to said bridge, wherein said bridge includes a fourth channel (fig.1, 130) dedicated to said input/output unit. (col.5, lines 19-33)

As per claims 2, 12, 22, Swanstrom discloses wherein each of said channels includes buffer memories adapted to stored data when a previous data transfer is being performed. (col.24, lines 14-28)

As per claims 3, 13, 23, swanstrom discloses wherein said buffer memories comprises FIFO buffer memories. (col.24, lines 14-28), buffers inherently includes FIFO.

As per claims 4, 14, 24, Swanstrom discloses a multi-port static random access memory (SRAM) adapted to stored data when a previous data transfer is being performed. (col.24, lines 14-28)

As per claims 5,15, 25, Swanstrom discloses a multiplexor adapted to selectively connect to other channels. (col.17, lines 50-61), (col.18, lines 22-31)

As per claims 6,16, 26, Swanstrom discloses at least one memory unit comprises a first-type memory unit and a second-type memory unit

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different than said first-type memory unit, wherein said third channel is dedicated to said first-type memory unit and said bridge includes a fifth channel dedicated to said second-type memory unit. (col.4, lines 37-63)

As per claims 7, 17, 27, Swanstrom discloses wherein said first-type memory unit comprises static random access memory (SRAM) and said second-type memory unit comprises synchronous dynamic random access memory (SDRAM). (col.22, lines 20-37)

As per claims 8, 18, 28, Swanstrom discloses at least one input/output unit comprises one or more of a peripheral interface, graphics interface, and serial bus interface, and wherein said bridge includes dedicated channels for each of said peripheral interface, graphics interface, and serial bus interface. (col.17, line 50-col.18, line 8)

As per claims 9, 19, 29, Swanstrom discloses at least one peripheral device includes one or more of a serial connection, network interface connection, and programmable input/output connection each connected to said peripheral device bus. (col.17, line 20-col.18, line 8)

Response to Amendment

3. Applicant's amendment filed on 5/12/04 have been fully considered but are not place an application in condition for allowance.

a. In response to applicant's argument that with respect to the claim language distinguishing the channels in the bridge from buses channels external to the bridge, provide channel(s) "in said bridge". This claim language provides that the channels are in the bridge and are therefore different than the

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buses/channels external to the bridge shown in figure 10 of Swanstrom.

Examiner respectfully disagrees. A bridge (fig.1, 106), plurality channels(busses) (104,108,120 and 130), and furthermore, each of these buses can comprise single or multiple channels. For example, 104 dedicated for cpu 102(single) whereas the 130 (multiple channels for different data types (col.4, lines 19-26) for devices 142-146).

Thus, the prior art teaches the invention as claimed and the amended claims do not distinguish over the prior art as applied.

Conclusion

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. *Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim Huynh whose telephone number is (703)305-5384 or via e-mail*

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addressed to [kim.huynh3@uspto.gov]. The examiner can normally be reached on M-F 8:30AM-6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (703) 305-4815 or via e-mail addressed to [mark.rinehart@uspto.gov]. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9306 for regular communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)306-5631.

Kim Huynh

August 10, 2004



MARK H. RINEHART
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100